

WE CLAIM:

1. A composition comprising one or more pharmaceutical agents selected from the group consisting of an α -adrenergic blocker, a phosphodiesterase inhibitor, and a prostaglandin in a buffer wherein said
5 buffer comprises a substrate for nitric acid synthetase.
2. The composition of claim 1 wherein the α -adrenergic blocker is phentolamine mesylate, or any pharmaceutically acceptable salt thereof.
3. The composition of claim 1 wherein the
10 phosphodiesterase inhibitor is selected from the group consisting of papaverine hydrochloride or Sildenafil or any pharmaceutically acceptable salt thereof.
4. The composition of claim 1 wherein the prostaglandin is alprostadil.
5. The composition of claim 1 wherein the buffer comprises
15 L-arginine and, optionally, a pharmaceutically acceptable excipient or carrier.
6. The composition of claim 5 wherein the buffer comprises glycine having a pH range of from about 3 to about 5.
7. The composition of claim 1 wherein the buffer comprises
20 a mixture of arginine and glycine having a pH range of from about 3 to about 5.
8. The composition of claim 1 wherein the buffer comprises glycine and L-arginine in a weight ratio of about 1:20.

9. The composition of claim 7 wherein the buffer further comprises benzyl alcohol and mannitol and has a pH range of from about 3 to about 5.

5 10. The composition of claim 1 wherein the weight ratio of phentolamine mesylate: papaverine hydrochloride: alprostadil is about 0.5:7.5:0.005 to about 5:30:0.02.

11. The composition of claim 1 wherein the weight ratio of phentolamine mesylate : papaverine hydrochloride: alprostadil is about 1:30:0.01.

10 12. The composition of claim 1 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are in the range of about 0-40 µg/ml alprostadil, about 0-50 mg/ml papaverine, and about 0-10 mg/ml phentolamine.

15 13. The composition of claim 1 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are in the range of about 1.25-5 mg/ml phentolamine, about 7.5-30 mg/ml papaverine, and about 5-20 µg/ml alprostadil.

20 14. The composition of claim 1 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are about 1 mg/ml phentolamine, about 30 mg/ml papaverine, and about 0.01 mg/ml alprostadil.

15. The composition of claims 12, 13, or 14 wherein the vasoactive agents are present in a total volume of 0.5 µl.

25 16. The composition of claim 1 wherein the dosage of alprostadil is about 5 µg/ml in a total volume of 0.5 ml.

17. The composition of claim 1 wherein the dosage of phentolamine is about 1.25 mg/ml in a total volume of 0.5 ml.

18. The composition of claim 1 wherein the pH range of the buffer is from about 3 to about 7.

5 19. A method for the treatment of male erectile dysfunction which comprises administering a pharmacologically effective amount of a composition comprising one or more of the following pharmaceutical agents selected from the group consisting of an α -adrenergic blocker, a phosphodiesterase inhibitor, and a prostaglandin in a buffer.

10 20. The method of claim 19 wherein the α -adrenergic blocker is phentolamine mesylate, or any pharmaceutically acceptable salt thereof.

21. The method of claim 19 wherein the phosphodiesterase inhibitor is papaverine hydrochloride or any pharmaceutically acceptable salt thereof.

15 22. The method of claim 19 wherein the prostaglandin is alprostadil.

23. The method of claim 19 wherein the buffer comprises L-arginine and, optionally, a pharmaceutically acceptable excipient or carrier.

20 24. The method of claim 23 wherein the buffer comprises glycine having a pH range of from about 3 to about 5.

25. The method of claim 19 wherein the buffer comprises a mixture of arginine and glycine having a pH range of from about 3 to about 5.

26. The method of claim 19 wherein the buffer comprises glycine and L-arginine in a weight ratio of about 1:20.

27. The method of claim 25 wherein the buffer further comprises benzyl alcohol and mannitol and has a pH range of from about 3 to about 5.

28. The method of claim 19 wherein the weight ratio of phentolamine mesylate: papaverine hydrochloride: alprostadil is about 0.5:7.5:0.005 to about 5:30:0.02.

29. The method of claim 19 wherein the weight ratio of phentolamine mesylate: papaverine hydrochloride: alprostadil is about 1:30:0.01.

30. The method of claim 19 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are in the range of about 0-40 µg/ml alprostadil, about 0-50 mg/ml papaverine, and about 0-10 mg/ml phentolamine.

31. The method of claim 19 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are in the range of about 1.25-5 mg/ml phentolamine, about 7.5-30 mg/ml papaverine, and about 5-20 µg/ml alprostadil.

32. The method of claim 19 wherein the dosage of phentolamine mesylate, papaverine hydrochloride, and alprostadil are about 1 mg/ml phentolamine, about 30 mg/ml papaverine, and about 0.01 mg/ml alprostadil.

33. The method of claim 30, 31, or 32 wherein the vasoactive agents are present in a total volume of 0.5 µl.

34. The method of claim 19 wherein the dosage of alprostadil is about 5 µg/ml in a total volume of 0.5 ml.

35. The method of claim 19 wherein the dosage of phentolamine is about 1.25 mg/ml in a total volume of 0.5 ml.

5 36. The method of claim 19 wherein the pH range of the buffer is from about 3 to about 7.

37. A composition comprising an α -adrenergic blocking agent, a phosphodiesterase inhibitor and a prostaglandin in a pharmaceutically acceptable carrier or excipient.

10 38. The composition of claim 37 wherein the α -adrenergic blocking agent is phentolamine or a pharmaceutically acceptable salt thereof.

39. The composition of claim 37 wherein the phosphodiesterase inhibitor is selected from the group consisting of Sildenafil and papaverine or pharmaceutically acceptable salts thereof.

15 40. The composition of claim 37 wherein the prostaglandin is alprostadil.

41. The composition according to claim 37, 38, 39, and 40 further comprising a buffer.

20 42. The composition according to claim 41 wherein the buffer comprises glycine, arginine, or a mixture thereof.

43. The composition according to claim 41 wherein the composition has a pH range from about 3 to about 7.

44. The composition according to claim 41 wherein the composition has a pH range from about 3 to about 5.

45. The composition according to claim 42 wherein the composition has a pH range from about 3 to about 7.

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46. The composition according to claim 42 wherein the composition has a pH range from about 3 to about 5.